A Community Adolescent Breastfeeding Study – Lessons Learned

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Introduction

Health Literacy – a critical and modifiable factor for improving health outcomes and reducing health disparities
Introduction

- Adolescent mothers and their infants
  - Higher risk of disease and worse health outcomes
  - Less likely to breastfeed
  - More likely to breastfeed for a shorter time

Public Health Issue
How are these problems related to health literacy?
Learning Objectives

1. Describe three different health literacy assessment tools used with adolescents.

2. Describe the relationship between health literacy and breastfeeding outcomes among adolescents.

3. Identify different strategies for recruiting adolescent mothers.
Study Team Members

• Nikki Keene Woods, PhD – behavioral scientist

• Amy Chesser, PhD – health communication scientist

• Jennifer Wipperman, MD – family medicine

• Two research associates – education and exercise science backgrounds

• Several summer interns
Methods

• Adolescent mothers from Wichita

• Assessment
  • Breastfeeding questionnaire
    • Previous breastfeeding outcomes
    • Breastfeeding knowledge
    • Social supports
  • Three health literacy assessments
Methods

- REALM-Teen
- 3 minutes
- Orally administered
- Previously validated with adolescent population

Methods

- **TOFHLA**
- Timed 22 minute test
- Oral instructions
- Part numeracy and part literacy
- Previously validated with adolescent population
Methods

• Chew
  • 3 questions
  • Health literacy screening tool
  • Not validated with adolescents
Methods

• Recruitment Sites
  • Center for Health and Wellness
  • GraceMed
  • Healthy Babies – SGHD
  • Via Christi Family Medicine
  • Wesley Family Medicine
  • WIC Program - SGHD
Results

Participant Demographics (N=70)

• Median age was 18 years
• 87% (n=61) lived in an urban setting
• 70% (n=49) were unemployed
• 36% (n=25) had high school diploma; 20% (n=14) attended some college
  • 71% (n=46) of their mothers had high school education or above
  • 71% (n=39) of their fathers had high school education or above
• 59% (n=40) Caucasian; 21% (n=14) African American
• 30% (n=21) Hispanic or Latino
• 71% (n=49) in a relationship
• 49% (n=34) of their mothers breastfed
Results

Participant Reported Social Support

- Physician encouraged them to breastfeed – 60% (n=42) strongly agreed
  - Mean = 1.60 (SD=1.1)

- Mother encouraged them to breastfeed – 33% (n=23) strongly agreed
  - Mean = 2.86 (SD=2.0)

- Partner encouraged them to breastfeed – 31% (n=22) strongly agreed
  - Mean = 3.47 (SD=2.4)

(1=strongly agree – 5=strongly disagree)
Results

Breastfeeding Outcomes

• 84% (n=59) initiated breastfeeding
• Average breastfeeding duration was 11 weeks (SD=16 weeks)
• Median breastfeeding duration was 6 weeks

• Healthy People 2020:
  • 81.9% of babies ever breastfed
  • 60.6% of babies breastfed at 6 months
- Health literacy was positively correlated with breastfeeding initiation ($r_s=0.59$, $p < 0.001$) but not duration.

- Breastfeeding knowledge was associated with breastfeeding initiation (Breastfeeding, mean BFK score 21.7 (SD=5.7); No breastfeeding, mean BFK score 16.7 (SD=3.7), $t(66) = -3.51$, $p =0.001$) but not duration.
Results

Health Literacy & Literacy Levels

• Realm-Teen: 60% adequate literacy (n=42)

• TOFHLA: 90% adequate health literacy (n=63)

• 3 Question: 90% adequate health literacy (n=63)
Results

-Breastfeeding knowledge for individuals with limited vs. adequate health literacy as measured by the REALM-Teen (t=-4.30, p< .001)
Results

• Challenges
  • Locating and recruiting adolescent mothers
  • Differences between the three health literacy tools in the participating mothers
Discussion

Lessons Learned

- Difficult to assess adolescent health literacy
- Possible breastfeeding connections to health literacy and social support
- Challenges associated with large multi-site community research project
Discussion

- Explore future community-based interventions to support breastfeeding by adolescent mothers
- Focus on rapid assessment/identification of those in need
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